



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/760,686 | 01/16/2001 | Sanjay Agarwal | | 4090 |

7590 11/25/2003
SANJAY AGARWAL
CHIPSOL, Inc.
4702 CHEENEY STREET
SANTA CLARA, CA 95054

Sanjay Agarwal
Order
Order

EXAMINER

CAO, CHUN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2185

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

SL

Office Action Summary

Application No.

09/760,686

Applicant(s)

AGARWAL, SANJAY

Examiner

Chun Cao

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9-13 is/are rejected.
- 7) ☒ Claim(s) 2-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-13 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

Claim Rejections - 35 U.S.C. § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a). The following term lack antecedent basic:

the plurality of values --claim 1, line 6;

the previously designed levels -- claim 1, line 6;

the pulse width modulated waveforms --claim 1, line 10;

the noise levels -- claim 9, line 3;

the drive state -- claim 10, line 1.

Claim Rejections - 35 U.S.C. § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giorgio (Giorgio), US patent no. 5,905,867 in view of Sakurai (Sakurai), JP Patent No. 11-065713.

As per claim 9, Giorgio teaches a method of operating networking equipment having a power management processor [42, fig. 2] and a plurality of cooling and ventilation systems [figures 1, 2; col. 5, lines 19-23], said method of comprising the steps of:

dynamically adapting the cooling and ventilation system to change fans speed in the networking equipment vicinity [col. 3, lines 22-39].

Giorgio is silent of dynamically adapting dynamically adapting the cooling and ventilation system to change noise levels in the networking equipment vicinity.

Sakurai teaches of dynamically adapting dynamically adapting the cooling and ventilation system to change noise levels in the networking equipment vicinity [fig. 1; abstract all; english translation, paragraphs 0005, 0014].

It would have been obvious to one of ordinary skill in the art at the time the invention to combine the teachings of Giorgio and Sakurai because they both teach a method of controlling cooling and ventilation system, and the specify teachings of Sakurai states above would improve the power consumption of Giorgio system and further reducing noise levels of Giorgio system.

As per claim 10, Sakurai teaches of controlling drive state of cooling system fans in the networking equipment facility [english translation, paragraph 0016; fig .2].

As per claim 11, Giorgio teaches that the networking equipment is a Storage Area Network (SAN) network equipment [fig. 1; col. 4, lines 13-26].

Art Unit: 2185

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giorgio (Giorgio), US patent no. 5,905,867 in view of Sakurai (Sakurai), JP Patent No. 11-065713 and Application Admitted Prior Art (AAPA).

As to claims 12 and 13, Giorgio and Sakurai do not explicitly teach the limitations as set forth in claims 12 and 13. However, Official Notice is taken that wireless networking equipment and wired networking equipment is old and well known in the computer art. Inherently, AAPA teaches that the networking equipment is wired, storage and wireless networking equipment [page 2, lines 1-3]. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include wired, storage and wireless networking equipment for utilizing the invention because this would maximizing the function of the system.

Allowable Subject Matter

8. Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

9. Claims 2-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Thomas et al., US patent no. 6,487,668, teaches of applying a pulse width modulated waveform to control the cooling fan [col. 8, lines 12-18].

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-7240 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit are followings: After-Final (703) 746-7238; Official (703) 746-7239; Non-Official (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.


Chun Cao

Nov. 18, 2003